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PATENT

Docket No. 1029-4012US3

Express Mail Label No. EI086261629US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

UTILITY APPLICATION AND FEE TRANSMITTAL

ASSISTANT COMMISSIONER FOR PATENTS
Box Patent Application
Washington, D.C. 20231

Sir:

Transmitted herewith for filing is the patent application of

First named Inventor

or Application Identifier: Thomas A. Bush

For:

DEVICE FOR CONTROLLING REMOTE INTERACTIVE RECEIVER

Enclosed are:

[X] 14 page(s) of specification, 1 page(s) of Abstract, 11 page(s) of claims

[X] 12 sheets of drawing [] formal [X] informal

[X] 5 page(s) of Declaration and Power of Attorney

[] Unsigned

[] Newly Executed

[X] Copy from prior application

[] Deletion of inventors including Signed Statement under 37 C.F.R. § 1.63(d)(2)

[X] Incorporation by Reference: The entire disclosure of the prior application, from which a copy of the combined declaration and power of attorney is supplied herein, is considered as being part of the disclosure of the accompanying application and is incorporated herein by reference.

[] Microfiche Computer Program (Appendix)

[] _____ page(s) of Sequence Listing

[] computer readable disk containing Sequence Listing

[] Statement under 37 C.F.R. § 1.821(f) that computer and paper copies of the Sequence Listing are the same

- ☐ Assignment Papers (assignment cover sheet and assignment documents)
 - ☐ A check in the amount of \$40.00 for recording the Assignment.
 - ☐ Assignment papers filed in parent application Serial No. _____.
 - ☐ Certification of chain of title pursuant to 37 C.F.R. § 3.73(b).
- ☐ Certified copy of Priority Document(s)
 - ☐ English translation documents
- ☒ Information Disclosure Statement
 - ☐ Copy of ____ cited references
- ☒ Preliminary Amendment
- ☐ Return receipt postcard (MPEP 503)
- ☒ This is a ☒ continuation ☐ divisional ☐ continuation-in-part (C-I-P) of prior application serial no. 08/444,202.
 - ☐ Cancel in this application original claims 5 of the parent application before calculating the filing fee. (At least one original independent claim must be retained for filing purposes.)
 - ☒ A Preliminary Amendment is enclosed. (Claims added by this Amendment have been properly numbered consecutively beginning with the number following the highest numbered original claim in the prior application.
- ☒ The status of the parent application is as follows:
 - ☒ A Petition For Extension of Time and a Fee therefor has been or is being filed in the parent application to extend the term for action in the parent application until December 2, 1997.
 - ☐ A copy of the Petition for Extension of Time in the co-pending parent application is attached.
 - ☐ No Petition For Extension of Time and Fee therefor are necessary in the co-pending parent application.
- ☒ Please abandon the parent application at a time while the parent application is pending or at a time when the petition for extension of time in that application is granted and while this application is pending has been granted a filing date, so as to make this application co-pending.
- ☒ Transfer the drawing(s) from the parent application to this application.
- ☒ Amend the specification by inserting before the first line the sentence:
This is a ☒ continuation ☐ divisional ☐ continuation-in-part of co-pending application Serial No. 08/444,202 filed May 18, 1995.

I. CALCULATION OF APPLICATION FEE

					Basic Fee	
	Number Filed		Number Extra	Rate	\$ 790.00	
Total Claims	49	-20=	29	x	\$22.00	\$ 638.00
Independent Claims	5	- 3=	2	x	\$82.00	\$ 164.00
Multiple Dependent Claims						
	[] yes		Additional fee	=	\$270.00	\$ 0.00
	[X] no		Additional fee	=	NONE	

Total: \$1,592.00

- [X] A statement claiming small entity status is attached or has been filed in the above-identified parent application and its benefit under 37 C.F.R. § 1.28(a) is hereby claimed. Reduced fees under 37 C.F.R. § 1.9(F) (50% of total) paid herewith \$796.00.
- [X] A check in the amount of \$796.00 in payment of the application filing fees is attached.
- [] Charge Fee(s) to Deposit Account No. 13-4500. Order No. _____. A DUPLICATE COPY OF THIS SHEET IS ATTACHED.
- [X] The Assistant Commissioner is hereby authorized to charge any additional fees which may be required for filing this application, or credit any overpayment to Deposit Account No. 13-4500. A DUPLICATE COPY OF THIS SHEET IS ATTACHED.

Respectfully submitted,

MORGAN & FINNEGAN, L.L.P.

By: Bruce D. DeRenzi
Bruce D. DeRenziDated: December 2, 1997Registration No. 33,676

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Rev. 11/24/97

PATENT

Docket No. 1029-4012US3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : Thomas A. Bush Group Art Unit: 2602
Prior Application :
Serial No. : 08/444,202 Examiner: C. Grant
Filed : May 18, 1995
For : DEVICE FOR CONTROLLING REMOTE INTERACTIVE RECEIVER

EXPRESS MAIL CERTIFICATE

Express Mail Label No.: EI 086 261 629 US

Date of Deposit : December 2, 1997

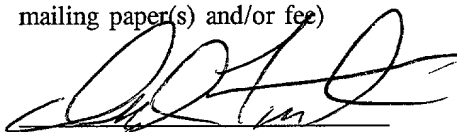
I hereby certify that the following attached paper(s) and/or fee

1. Petition and Fee for Extension of Time (37 C.F.R. §1.136(a));
2. Check in the amount of \$475 to cover the extension fee;
3. Utility Application and Fee Transmittal;
4. Check in the amount of \$796 to cover the application filing fee;
5. Preliminary Amendment;
6. Information Disclosure Statement;
7. Form PTO-1449; and
8. Return Postcard

are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. Sec. 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Box Patent Application, Washington D.C. 20231.

Israel Fuentes

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mailing paper(s) and/or fee)


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PATENT

Docket No. 1029-4012US3

Express Mail Label No. EI086261629US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : Thomas A. Bush

Prior Application :
Serial No. : 08/444,202 Group: 2602

Filing Date : May 18, 1995 Examiner: C. Grant

For : **Device for Controlling Remote Interactive Receiver**

Assistant Commissioner for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Prior to issuance of the first Office Action, please amend the above-identified application as follows:

IN THE SPECIFICATION:

Please amend the specification as follows:

On page 1, line 1, delete "This application," and insert --This is a continuation of co-pending application Serial No. 08/444,202 filed May 18, 1995 which--.

On page 1, line 3, after "1994," the phrase --now patent 5,475,585-- should be inserted.

On page 4, line 7, "querty" should be changed to --qwerty--.

On page 6, line 7, "26" should be changed to --11--.

On page 7, line 20, "389" should be changed to --34--.

On page 8, line 31, "10" should be changed to --14--.

On page 9, line 15, "10" should be changed to --14--.

On page 10, line 28, "26" should be changed to --11--.

On page 11, line 3 "26" should be changed to --11--.

On page 11, line 11, please add the following sentence: --Transmitter

314 can include an interface 314a for interacting with a videogame--.

On page 13, line 19, "388" should be changed to --385--.

On page 13, line 20, "396" should be changed to --391--.

On page 13, lines 26 and 33 "querty" should be changed to --qwerty--.

On page 14, line 5, "their" should be changed to --his--.

IN THE CLAIMS:

Please cancel claim 5.

Please amend claims 1 and 10 as follows:

1. (Once Amended) A device for controlling an interactive receiver unit at a remote location, comprising:

a housing forming an enclosure,

a manually actuatable keypad mounted on the housing,

control means mounted in the enclosure and operatively connected to said manually actuable keypad for receiving selected input data entered manually on the keypad corresponding to desired programming selections at the remote location,

means for storing financial information of the user, and transmitter means operatively connected to said control means for

a) transmitting desired programming selections to an interactive receiver unit at a remote location corresponding to a selected keypad sequence so as to choose a desired programming and interact therewith through the manually actuable keypad, and

b) transmitting the financial information of the user to the receiver unit at the remote location and including switch means for switching between keypad selection of normal television channels and keypad selection of desired programming selections.

10. (Once Amended) A remote control device for use with a transactional processing system having a receiver unit that receives identical transaction information sets broadcast in subchannels from a programming transmitter and then selects, stores and displays a desired information set, comprising:

a housing,

a manually actuable keypad positioned on an outer surface of the housing,
control means contained within the housing and operatively connected to said
manually actuable keypad for receiving data entered manually on the keypad
corresponding to desired programming selections in the receiver unit that receives
identical transaction information sets,

means for storing financial information of the user, [and including] means
mounted by the housing for inputting said financial information to the financial storing
[storage] means,

transmitter means operatively connected to said control means for

a) transmitting desired programming selections to a receiver unit
corresponding to the selected keypad sequence so as to choose a desired programming
and interact with the receiver unit through the manually actuable keypad, and

b) transmitting any financial information of the user to the receiver unit to
authorize a desired transaction in real time,

phone circuitry including speaker and microphone means, and phone receiver
[unit] and phone transmitter means for transmitting and receiving phone signals to and
from said receiver unit, and

switch means for actuating said remote control device between 1) a phone
wherein said phone circuitry is activated, and 2) a device for selectively interacting
with said receiver unit to choose desired programming and authorize transactions.

Please amend the following claims as indicated:

In claim 6, line 2, please delete the word "inputting" and insert the word --storing--.

In claim 8, line 2, please delete the word "querty" and substitute --qwerty--.

In claim 13, line 1, please change the numeral "10" to the numeral --12--.

In claim 16, line 2, please delete the word "querty" and substitute --qwerty--.

In claim 17, line 2, please add in the word --another-- "after including".

In claim 19, line 7, please add --:-- after the word "comprising" and in line 18, please delete the word "storage" and substitute the word --storing--.

In claim 20, line 13, please add --:-- after the word "comprising".

In claim 23, line 1, please delete the numeral "20" and substitute --22--.

In claim 24, line 2, please delete both instances of the forward "storage" and substitute the word --storing-- for each deletion.

In claim 26, line 2, please delete the word "querty" and substitute the word --qwerty--.

In claim 27, line 6, please delete the word "data" and substitute
--number--.

In claim 34, line 2, please delete the word "storage" and substitute
--storing--.

In claim 36, line 2, please delete the word "querty" and substitute the
word --qwerty--.

In claim 37, line 4, please insert the letter --a-- before the word
"phone"; and in line 7, please delete the word "unit" and substitute --device--.

In claim 44, lines 1-2, please delete the phrase "wherein said
transaction processor after authorizing payments, transmits" and substitute
--further comprising means for transmitting--.

REMARKS

Applicant has amended the specification and claims herein to conform with the
amendments made in parent application Serial No. 08/444,202. Applicant has also submitted
herewith corrected informal drawings Figures 3, 5, 10 and 12 which were submitted to the
Official Draftsperson in the parent application.

PATENT

Docket No. 1029-4012US3

Express Mail Label No. EI086261629US

Applicant respectfully requests early and favorable consideration of the claims
as amended herein.

Respectfully submitted,

MORGAN & FINNEGAN, L.L.P.

Dated: December 2, 1997

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Bruce D. DeRenzi
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DEVICE FOR CONTROLLING REMOTE INTERACTIVE RECEIVER

This application is a continuation-in-part application of United States Patent Application Serial No. 08/191,143 filed February 2, 1994, which is a continuation of application Serial No. 07/591,380, filed October 1, 1990, now abandoned, which are hereby incorporated by reference in their entirety into the present application.

Field of the Invention

This invention relates to a device for controlling a remote interactive receiver unit and, more particularly, to a remote control device which transmits user financial information or programming information to an interactive receiver unit positioned at a remote location.

Background of the Invention

In the copending parent application, a transactional processing system is disclosed for purchasing products and services from a plurality of available products and services, and for processing corresponding financial transactions in real time. A transmitter broadcasts and updates a plurality of transaction information sets associated with a plurality of available products and services via a first communication channel. This first communication channel has a plurality of subchannels, each corresponding to a transaction information set in the first channel.

A plurality of receiver units, e.g., receivers positioned in different households, serve a respective plurality of users, and simultaneously receive the identical transaction information sets broadcast from the transmitter. Each receiver unit includes a user interactive mechanism for selecting and storing a desired information set and for selecting a desired transaction for purchasing a product and services associated with a selected set.

A second communication channel originates at the receiver units and financial information of a respective user is transmitted from a receiver unit through the channel to a transaction processor, which receives the financial information of respective users. The transaction processor generates an authorization signal through the second communication channel to respective receivers to authorize a desired transaction in a real time for the selected products and services. The receiver unit could be incorporated within a television set.

In one aspect of the disclosed invention in the copending parent application, the receiver unit is a tabletop unit having a credit card slot for receiving a card and recording financial information of the user. The receiver unit also includes a keypad and other switches and functions for controlling television station selections. The receiver unit could also include phone components and be formed as a phone handset.

The use of remote devices for controlling television, video recorders/players, and other devices, however, is becoming more commonplace, and in some instances, required. Accordingly, it is desirable if the receiver unit of the transactional processing system could be controlled from a remote control device, and more preferably, a handheld remote control device. A remote control device should not only control processing instructions at the receiver unit, but also receive financial information of a user, such as by a smart card or credit card. Additionally, it is desirable to have a remote control device which can control operation of a receiver unit positioned at a remote location in which the remote control device not only transmits desired programming selections, but also receives and transmits to the receiver unit financial information of a user for further transactions by the receiver unit.

Summary of the Invention

The present invention now allows transmission from a remote control device of desired programming selections to a receiver unit positioned at a remote location so as to choose a desired programming instruction set and interact therewith through a manually actuatable keypad. The remote control device also transmits financial information of the user to the receiver unit. The receiver unit selects, stores and displays on a screen, such as television, the desired information set from these sets that are simultaneously received in the receiver unit.

A housing forms an enclosure and has a manually actuatable keypad mounted on the housing. A processor is mounted in the enclosure and operatively connected to the manually actuatable keypad for receiving data input from the keypad corresponding to desired programming selections at the remote receiver unit. The remote control device also stores financial information of the user. A transmitter is operatively connected to the processor for transmitting the desired programming selections to the receiver unit corresponding to the selected keypad sequence so as to choose a desired programming and interact therewith. The remote control device also transmits financial information of the user to the receiver unit.

In one aspect of the invention, the remote control device comprises the handset of the phone. Phone numbers are dialed from the keypad, and phone data is transmitted and received to and from a phone receiver unit positioned at the receiver unit. The phone receiver unit is connected to the local office. The phone receiver unit also may be an integral part of the receiver unit.

The remote control device also includes a switch for switching between use as a phone handset and use as a controller which interacts with the receiver unit. The remote control device in another aspect of the invention includes a switch for

selecting between use as a controller for keypad selection of television channels and keypad selection of subchannels of the transaction information sets. Financial information can be input by wiping a card containing the financial information of the user within a slot positioned on the remote control device housing. The slot can include a magnetic-strip/IC reader. In still another aspect of the invention, the keypad is a query keypad.

Brief Description of the Drawings

The foregoing advantages of the present invention will be appreciated more fully from the following description, with reference to the accompanying drawings, in which:

Fig. 1 is an environmental view of the inside of a home showing a user having the remote control device of the present invention and using the device to interact with the transactional processing system receiver unit;

Fig. 2A is a block diagram of the Transactional Processing System (TPS);

Fig. 2B is a block diagram of an alternate embodiment of the Transactional Processing System.

Fig. 3 is a block diagram of a TPS for real-time service requiring continuous update.

Fig. 4 is a block diagram of a TPS transmission system.

Fig. 5 is an isometric view of a Transactional Processing System receiver unit having a handheld remote control device in the form of a phone handset where a credit card is longitudinally inserted in its lower portion.

Fig. 6 is an alternate embodiment of the receiver unit of Fig. 5 showing a different phone handset.

Fig. 7 is still another alternate embodiment of the receiver unit of Fig. 6 showing a different phone handset.

Figs. 8a, b is an isometric view of an alternate embodiment of the receiver unit.

Fig. 9 is an alternate embodiment of the remote control device.

Fig. 10 is an alternate embodiment of the remote control device which has no phone components.

Fig. 11 is an alternate embodiment of the remote control device showing a more complex remote control device having a query keyboard.

Fig. 12 is a block diagram of various components of the remote control device and portions of the Transactional Processing System.

Detailed Description of the Invention

Referring now to the drawings in which like numeral represent like components, Figure 1 illustrates an environmental view of the inside a house showing a user "U" having the remote control device 10 of the present invention using it in conjunction with the receiver unit 11 of the transactional processing system. As illustrated, the receiver unit 11 receives signals from a satellite dish 12, and satellite 13 uplink via cable 12a. Another receiver 11 is a part of the system and receives signals simultaneously from its satellite dish 12 and uplink connection. In this illustrated embodiment, the receiver unit 11 is connected to a television 11a which displays selected transactions sets.

Figure 2A illustrates block diagram of Transactional Processing System (TPS). Many details of the Transaction Processing System are set forth in the copending parent application which is incorporated by reference in its entirety into the present application. For purposes of understanding, a general description of the Transaction Processing System is set forth below.

A transmitting source 14 broadcasts a signal, preferably video, representing one or many video menus, offering the consumer the option to pay for either a product or a service.

The menu information 15 contains the picture of graphic information corresponding to vendors and services available in the system. The menu information could be broadcasted through a transmission channel 16 to a receiver 18 typically operated by a cable, telephone company, microwave TVRO or DBS operator. In a preferred embodiment described herein, cable operator 18 would in turn transmit information to receiver units 26 within its broadcast area, through transmission channel 20. Transmission channel 16 can be a full video channel or a narrow band channel through a satellite uplink-downlink.

The menu information 15 could be an aggregate of many pictures corresponding to various products or services combined into one full video signal and demodulated into narrow band information, whereby the TPS receiver would allow the customer to choose from many different menus without the cable operator 18 giving up a wide band or prime video channel.

In addition to menu information 15, the transmitting source 14, would also broadcast prompting data 15A, which represent the necessary information to electronically prompt a subscriber through the process of purchasing an item via a mail order catalog or paying for a selected service. Once the vendor or service is selected the prompting data for each vendor or service would be downloaded into a RAM within the receiver unit 11. The prompting information for each vendor or service could then be displayed on an LCD within the receiver unit 11 or in a television set connected to the receiver unit 11. It is also possible to combine both the picture and prompting data information and transmit the combination to receiver unit 11.

The user at the receiver unit 11, makes a menu selection and answers the questions or prompts, pertinent to the selected vendor or service. The user then wipes a credit/debit card through the receiver unit 11 which allows the credit/debit card to be authorized and a purchase or payment be made. The card information would be transmitted from receiver unit 11 to

transaction processor 30 via transmission channel 28. Typical receiver unit 11 would transmit the user selection and the financial account information via a modem, through a telephone line to transaction processor 30. The transaction processor 30 would then verify the user's financial account. This includes verifying whether the consumer does in fact have the requisite sum available in the chosen account to pay for the selection made.

In the event that the consumer has used a credit card, the transaction processor 30 would then forward the verified information to regional credit card network 42, through transmission channel 32. This information would be then forwarded to a participating financial institution 46, through transmission channel 44. The financial institution 46 would in turn pay the vendor or service provider 60, and the consumer would receive a bill or receipt for that particular transaction. Similarly, in the event that the consumer has used a debit card, the transaction processor 30, would then forward the verified information to a regional debit card network 36, through transmission channel 38. This information would be then forwarded to a participating financial institution 40, through transmission channel 38.

The transaction information would be also transmitted from transaction processor 30 to vendor or service provider 60, via transmission channel 48. Vendor or service provider 60 would then in turn provide the service or the goods purchased to the user via appropriate channels. Vendor or Service provider 60 could also send purchasing data to transmitting source 14 via transmitting channel 64 for upgrading service and product information, product availability, price change, products purchased, and various other information.

There are various scenarios in which transaction information could be verified. For example, in order for the consumer to be assured that the selected product or service can be delivered on

specific desired terms, the transaction processor 30 would cross check the transaction information transmitted through channel 28 with the corresponding vendor or service database. Once that transaction has been cross-checked, the credit card processor 30 would send the authorization signal.

Alternatively, the vendor/service provider 60 may update its corresponding database and transmit such updated information to transmitting source 14. Transmitting source 14 would then change the menu 15 and prompting data 15a and continuously broadcast the updated information to receiver units 11. Actual cross-check before authorization could be made locally in receiver unit 11. Hence customer's selection would be compared with updated information broadcasted to receiver 11 for product verification purposes.

Fig. 2B depicts an alternate communication path for transaction authorization. When cable operator 18 requires to monitor all transaction interactions the consumer through the receiver unit 11 would make a selection. The information representing such selected service or product would be transmitted to cable operator 18 via transmission channel 22. Cable operator 18 after receiving the transaction information would retransmit such information to transaction processor 30 via transmission channel 24. Thereafter the transaction verification would proceed as discussed before.

There are, however, situations when up to the minute information is critical to the consumer and the retailer. A typical scenario is providing a limited product or service to a pool of consumers. This includes tickets for a performance of a sporting event. Since the available seats are very limited, it would become impractical to update the database by service provider 60, transmit that database to source 10, and retransmit that information to receiver unit 11 for verification purposes.

An alternate communication path as depicted in Fig. 3 could thus be established, wherein TPS user through a series of prompts

would select the desired event. The information representing the user's choice would be transmitted to a ticket provider 61 like Ticketron, via transmission channel 52. The ticket provider 61 contains a database wherein available seats are continuously updated and the desired selection would be cross-checked against that database. If desired seat is available, the ticket provider 61 would transmit the transaction information to transaction processor 30 via transmission channel 50 for credit authorization. Once the credit is authorized as described hereinabove, the credit processor would transmit the verification signal to ticket provider 61, wherein the database contained therein would be updated and a confirmation message would be transmitted to the receiver unit 11 via transmission channel 52. The ticket provider 61 would transmit updated event availability and other pertinent information to source 10 through transmission channel 64.

Fig. 4 shows the block diagram of transmitting source 14, wherein all the pertinent information for system's operation is programmed and accordingly transmitted to receiver units 11. Vendor or service provider's data can be transferred to the transmitting source 14, either through asynchronous communication or by hard copy data like computer disk storage. In Fig. 4, the high capacity data input device 202, has the ability to load menu (picture or graphics) and prompting data information via external disk storage devices 214 and 216.

Alternatively, both the video and prompting information could be combined and fed into the data input device 202 together. Various vendors who do not maintain an in-house database, could periodically update their product information and send the updated information to TPS programmer, in the form of computer disks 214 and 216. That information would be then transferred to the Main CPU 204, which controls the overall data formatting, and transmits the formatted data to parallel data to video interface 212.

In situations where the vendor or the service provider maintains a database for updating the product information, transmitting source 14 would be connected to that database via communications channel 64. The high speed vendors' or service providers' data would then be transmitted asynchronously from corresponding databases to computer dedicated processor 201. That information would be buffered within processor 201. The processor 201 would then perform packet formatting and output this data in a synchronous manner that is polled by the main DPU 204.

The main CPU 204, would perform time multiplexing to gather data belonging to various vendors and service providers. The data along with the formatted menu, prompting data and other housekeeping information will be time multiplexed and assembled by the main CPU 204 for transmission over the parallel bus to the parallel data to video interface 212. The video interface 212, converts the digital data into video format for transmission to receiver units 11. In the embodiment mentioned herein, video interface 212, is model 17480, by Quantel.

Hard disk 206 stores all the necessary information for the transmitting source 14. Data from main CPU 204 to video interface 212, is transmitted via an extended SCSI or ESDI, as commonly known in the art. Further information of the Transaction Processing Information of the present invention can be obtained from the incorporated parent application.

Referring now to Figures 5 through 11, there are illustrated various alternate embodiments of a remote control device which is associated for use with the receiver unit 26 of the Transaction Processing System. For purposes of understanding each alternate embodiment of the remote control device is indicated by a reference numeral beginning in the 300 series. Those components that are common to the different embodiments are given similar reference numerals. In Figure 5, there is illustrated a receiver unit 11 which has a remote control device 300 associated

therewith. The remote control device 300 is configured similar to a phone handset and is received within an end slot 302 of the receiver unit 26. The remote control device 300 includes phone circuitry (Figure 12) which includes a microphone 306, receiver 308 and associated components 310 for receiving and transmitting phone messages to and from the receiver unit 11. The phone preferably has wireless connection to the receiver unit 11, and can use the transmitter 314 of the remote 300 for communication. The transmitter operates on several frequencies and transmits financial information on a communication channel different from the communication channel used to transmit declassified programming selections.

The receiver unit 11 is operatively connected to the phone line 316 which connects to the central office. As noted above, the phone line connected to the receiver unit forms a part of the second communication channel (Figure 1).

The receiver unit 11 includes all the standard controls such as a numeric keypad 320, and a selector 322 for activating a scrolling function within the receiver unit 11. Other function keys may indicate power, tv/vcr, channel selector and volume controls. It is advantageous for any controls and function keys that are included on the remote control device to be duplicated on the receiver unit 11 in case the remote control device 300 is lost, misplaced or broken. The receiver unit 11 also can include a slot (not shown) for accepting a smartcard or credit card to obtain and store financial information of the user.

As shown in Figure 5, the remote control device 300 also includes a slot 324 at the bottom portion of the handset adjacent to the speaker microphone. A credit card or smart card 325 is inserted longitudinally into the slot 324. The slot 324 typically is a magnetic - strip/IC reader, which reads the financial information contained on the magnetic strip 326 of the card.

Figure 12 illustrates a high level block diagram of a remote control device 300 of the present invention, and shows various

components of the device. The various switching mechanisms, functions, keypad and circuiting components can be selected by one skilled in the art. The remote control device 300 of the present invention also includes a switch mechanism 310a for switching between use of the remote control device as a phone handset and use as a controller for interaction with the receiver unit 11. Additionally, the remote control device includes a switching mechanism 327 for switching between use as a remote control device which selects television or cable channels and keypad selection of subchannels of the transaction information sets controlled by the receiver unit 11.

The remote control device 300 includes an eight bit microprocessor 330 which includes permanent firmware for operating some of the other components of the device. Additionally, the device 300 includes a battery 332, a lamp 334 for illuminating an LCD display and other controls and functions. A crystal oscillator 336 ensures frequency control. The keypad 320 is operatively connected to the microprocessor 330. The remote control device also includes a long term storage 338, such as an EEPROM, which stores financial information of the user for subsequent transactions, hours, days, or months in advance.

Figure 6 illustrates an embodiment of a remote control device 350 of the present invention similar to that shown in Figure 5. The card containing financial information is inserted longitudinally in a slot 352 positioned at the top portion of the handset adjacent the receiver.

Figure 7 still shows another embodiment of a remote control device 356 of the present invention where the card is inserted horizontally in the top slot 352.

The embodiments of Figures 5, 6 and 7 could be used with conventional games.

Figure 8a discloses another embodiment of a remote control device, indicated generally at 360, of the parent invention where the speaker microphone assembly 362, which includes some control

functions, is pivotally attached to the main body 364 of the remote control device. Figure 8B shows the remote control device 360 resting in the slot 366 of the receiver unit 322.

Figure 9 is another embodiment of the remote control device 370 of the present invention in which more numerous control functions are mounted on the device. These functions can include a keypad 371, volume control 372, channel selection 373, power off/on 374, TV and radio selector 375, 376, scroll 377, and switches 378, 379 for selecting between phone operation and interactive communication with a receiver unit 11.

Referring now to Fig. 10, a more compact remote control device 380 which does not include phone components is illustrated. The device includes a slot 382 for receiving a credit card or other card containing financial information of the user as well as a small LCD display 384. A numeric keypad 386 for controls either selection of television channels or various transaction processing sets depending on the position of the selector switch 387. Additionally, the device includes a power switch 388, and a TV/VCR button 390. The device also includes standard channel and volume buttons 394, 396. Other controls will be included desired.

Referring now to Fig. 11, there is shown a stationary remote control device 400, which can be mounted on an end table, or other table such as adjacent to a sofa, for controlling function of the receiver unit 11. This device 400 interacts with the receiver unit 11, and includes a split querty keyboard 404 which includes function keys F1 through F12. Half of the keyboard 404a comprises a lower portion which is pivotally mounted to the upper half keyboard section 404b. Additionally, in one aspect of the invention, this embodiment of the remote control device 400 can include most components of the transactional processing system receiver unit so that it doubles as a receiver unit itself, with full computing functions such as provided with a querty keyboard 404.

The remote control device of the present invention is advantageous because it now allows control over the receiver unit of the transaction processing system from a remote location. Additionally, a user sitting in his home can relax and not only use a telephone, but also at their option, input financial information and communicate with the receiver unit for selecting various transactions while maintaining the same device.

It should be understood that the foregoing description of the invention is intended merely to be illustrative thereof, and that other embodiments, modification and equivalents may be apparent to those skilled in the art without departing from its spirit.

THAT WHICH IS CLAIMED IS:

1. A device for controlling an interactive receiver unit at a remote location, comprising
 - a housing forming an enclosure,
 - a manually actuable keypad mounted on the housing,
 - control means mounted in the enclosure and operatively connected to said manually actuable keypad for receiving selected input data entered manually on the keypad corresponding to desired programming selections at the remote location,
 - means for storing financial information of the user, and
 - transmitter means operatively connected to said control means for
 - a) transmitting desired programming selections to an interactive receiver unit at a remote location corresponding to a selected keypad sequence so as to choose a desired programming and interact therewith through the manually actuable keypad, and
 - b) transmitting the financial information of the user to the receiver unit at the remote location.
2. The device according to claim 1 including means for transmitting the financial information on a communication channel different from the communication channel used to transmit desired programming selections.
3. The device according to claim 1 wherein said device further comprises the hand set of a phone, wherein phone numbers are dialed from the keypad of said device, and including means for respectively transmitting and receiving data to and from the receiver unit positioned at the remote location.
4. The device according to claim 3 wherein said device includes switch means for switching between use of the device as a phone handset and use of the device as a controller for

interaction with the interactive receiver unit positioned at the remote location.

5. The device according to claim 1 including switch means for switching between keypad selection of normal television channels and keypad selection of subchannels of the transaction information sets.

6. The device according to claim 1 wherein said means for inputting financial information of said user includes a slot for wiping a card containing the financial information of the user.

7. The device according to claim 6 wherein said slot comprises a magnetic-strip/IC reader.

8. The device according to claim 1 wherein said keypad comprises a querty keypad.

9. The device according to claim 1 wherein said housing is configured to be held in one hand.

10. A remote control device for use with a transactional processing system having a receiver unit that receives identical transaction information sets broadcast in subchannels from a programming transmitter and then selects, stores and displays a desired information set, comprising

a housing,

a manually actuable keypad positioned on an outer surface of the housing,

control means contained within the housing and operatively connected to said manually actuable keypad for receiving data entered manually on the keypad corresponding to desired programming selections in the receiver unit,

means for storing financial information of the user,
and including means mounted by the housing for inputting
said financial information to the financial storage means,
transmitter means operatively connected to said control
means for

a) transmitting desired programming selections to a
receiver unit corresponding to the selected keypad sequence
so as to choose a desired programming and interact with the
receiver unit through the manually actuatable keypad, and

b) transmitting any financial information of the
user to the receiver unit to authorize a desired
transaction in real time,

phone circuitry including speaker and microphone
means, and receiver unit and transmitter means for
transmitting and receiving phone signals to and from
said receiver unit, and

switch means for actuating said remote control device
between 1) a phone wherein said phone circuitry is
activated, and 2) a device for selectively interacting with
said receiver unit to choose desired programming and
authorize transactions.

11. The remote control device according to claim 10 wherein
said keypad includes means for activating a scrolling function
within the receiver unit for scrolling through individual
transaction information sets.

12. The remote control device according to claim 10 wherein
said means for inputting financial information of said user
includes a slot for wiping a card containing the financial
information of the user.

13. The remote control device according to claim 10 wherein said slot comprises a magnetic-strip/IC reader.

14. The remote control device according to claim 10 wherein said financial information storage means includes long term storage means for storing financial information of the user for subsequent transactions.

15. The remote control device according to claim 14 wherein said long term storage means comprises an EEPROM.

16. The remote control device according to claim 10 wherein said keypad comprises a querty keypad.

17. The remote control device according to claim 10 including switch means for switching between keypad selection of normal television channels and keypad selection of subchannels of the transaction information sets.

18. The remote control device according to claim 10 wherein said housing is configured to be held in one hand.

19. A remote control device for use with a transactional processing system having a receiver unit that receives identical transaction information sets broadcast in subchannels from a programming transmitter and then selects, stores and displays a desired information set, said receiver unit also including means for receiving and selecting desired television channels, comprising

a closed housing which is configured to be held in one hand,

a manually actuatable keypad positioned on an outer surface of the housing,

control means contained within the housing operatively connected to said manually actuatable keypad for receiving data entered manually on the keypad corresponding to desired programming selections in the receiver unit,

means for storing financial information of the user, and including means positioned on the housing for inputting said financial information to the storage means,

transmitter means operatively connected to said control means for

a) transmitting desired programming selections to the receiver unit on a first communication channel corresponding to the selected keypad sequence so as to choose i) desired programming of transaction information sets and ii) selected television channels, and

b) transmitting the financial information of the user to a receiver unit on a second communication channel to authorize a desired transaction in real time, and

switch means for actuating said remote control device between 1) a television controller for selecting television channels, and 2) a controller for interacting with said receiver unit for selecting subchannels and transmitting financial information to said receiver unit.

20. A remote control device for selectively controlling interaction with a receiver unit of a transactional processing system used for purchasing products and services from a plurality of available products and services,

wherein said receiver unit includes means for receiving identical transaction information sets broadcast in subchannels from a programming transmitter, and including means for selecting, storing and then displaying a desired information set from the information sets received within

the receiver unit and to select a desired transaction, said receiver unit including means for receiving programming selection and financial information signals from a remote control device, said remote control device comprising

a manually actuable keypad,

control means operatively connected to said manually actuable keypad for receiving selected data entered manually on the keypad corresponding to desired programming selections in the receiver unit,

means for storing financial information of the user,
and

transmitter means operatively connected to said control means for

a) transmitting the desired programming selections to said receiver unit corresponding to a selected keypad sequence so as to choose the desired programming and interact therewith through the manually actuable keypad, and

b) transmitting the financial information of the user to the receiver unit through a second communication channel to authorize a desired transaction in real time.

21. The remote control device according to claim 20 wherein said keypad includes means for activating a scrolling function within the receiver unit for scrolling through individual transaction information sets.

22. The remote control device according to claim 20 wherein said means for storing financial information of said user includes a slot for wiping a card containing the financial information of the user.

23. The remote control device according to claim 20 wherein said slot comprises a magnetic-strip/IC reader.

24. The remote control device according to claim 20 wherein said storage means includes long term storage means for storing financial information of the user for subsequent transactions.

25. The remote control device according to claim 24 wherein said long term storage means comprises an EEPROM.

26. The remote control device according to claim 20 wherein said keypad comprises a query keypad.

27. The remote control device according to claim 20 wherein said receiver unit includes means connecting to a local phone line, and wherein said remote control device comprises the handset of a phone, wherein phone numbers are dialed from the keypad of said device, and including means for transmitting and receiving the phone data between the remote control device and the receiver unit.

28. The remote control device according to claim 27 wherein said remote control device includes switch means for switching between use as a phone handset and use as a controller for interaction with the receiver unit.

29. The remote control device according to claim 20 wherein said device includes means for selecting normal television channels, and including switch means for switching between keypad selection of television channels and keypad selection of subchannels of the transaction information sets.

30. A transactional processing system for purchasing products and services from a plurality of available products and

services and processing corresponding financial transactions in real-time comprising:

a programming transmitter means for broadcasting and updating a plurality of transaction information sets associated with said plurality of available products and services via a first communication channel, said first communication channel having a plurality of subchannels, said subchannels each transmitting a corresponding transaction information set in said first communication channel;

a receiver unit serving a user for simultaneously receiving identical transaction information sets broadcast in subchannels from the programming transmitter means, and including means for selecting, storing and then displaying a desired information set from the broadcast information sets simultaneously received within the receiver unit and to select a desired transaction, said receiver unit including means for receiving programming selection and financial information signals from a remote control device,

means forming a second communication channel originating at the receiver unit and through which financial information of the user is transmitted to a desired destination so as to authorize the desired transaction in real time for the selected products and services, and wherein

said remote control device comprising,

a manually actuable keypad,

control means operatively connected to said manually actuable keypad for receiving data entered manually on the keypad corresponding to desired programming selections in the receiver unit,

means for storing financial information of the user, and

transmitter means operatively connected to said control means for

a) transmitting the desired programming selections to the receiver unit corresponding to a selected keypad

sequence so as to choose the desired programming and interact with the receiver unit, and

b) transmitting the financial information of the user to the receiver unit to authorize a desired transaction in real time.

31. The system according to claim 30 wherein said keypad includes means for activating a scrolling function within the receiver unit for scrolling through individual transaction information sets.

32. The system according to claim 30 wherein said means for storing financial information of said user includes a slot for wiping a card containing the financial information of the user.

33. The system according to claim 32 wherein said slot comprises a magnetic-strip/IC reader.

34. The system according to claim 30 wherein said storage means includes long term storage means for storing financial information of the user for subsequent transactions.

35. The system according to claim 34 wherein said long term storage means comprises an EEPROM.

36. The system according to claim 30 wherein said keypad comprises a query keypad.

37. The system according to claim 30 wherein said receiver unit includes means connecting to a phone line of the central office, and wherein said remote control device comprises the handset of phone, wherein phone numbers are dialed from the keypad of said remote control device, said remote control device

including means for transmitting and receiving phone messages and data between the remote control unit and the receiver unit.

38. The system according to claim 37 wherein said remote control device includes switching means for switching between use as a phone handset and use as a controller for interaction with the receiver unit.

39. The system according to claim 30 wherein said receiver unit includes means for selecting normal television channels and said remote control device includes switch means for switching between keypad selection of television channels and keypad selection of subchannels of the transaction information sets.

40. The system according to claim 30 wherein said transaction information sets further comprises a plurality of prompting data corresponding to a product or service for prompting users to make a selection.

41. The system according to claim 40 wherein said set of transaction information sets further comprises:

a plurality of graphic information corresponding to the desired product or service.

42. The system according to claim 30 wherein said first communication channel comprises:

a satellite uplink/downlink transmission between said programming transmitter and one operator means for receiving and transmitting information; and

a broadcast channel from said operator means to said receiver unit.

43. The system according to claim 30 wherein said second communication channel is a phone line.

44. The system according to claim 30 wherein said transaction processor after authorizing payments, transmits an authorizing signal to a financial institution, said financial institution making payments to vendors or service providers.

45. The system according to claim 41 wherein said receiver unit is connected to a television set, said graphic information and said prompting data being displayed on said television set.

46. A device according to claim 1 wherein said transmitting means comprises means for interacting with a video game.

47. A device according to claim 1 wherein said interactive receiver is positioned within a television set.

48. A remote control device according to claim 10 including means for interacting with a video game.

49. A remote control device according to claim 19 including means for interacting with a video game.

50. A transactional processing system according to claim 30 wherein said programming transmitter means includes RAM for storing information for transmission.

Abstract

A remote control device controls interaction of an interactive receiver unit positioned at a remote location. The remote control device has a housing and manually actuatable keypad mounted on the housing. A control mechanism is mounted in the enclosure and operatively connected to the manually actuatable keypad for receiving selected input data from the keypad corresponding to desired programming selections of the interactive receiver unit positioned at the remote location. Financial information is stored in the remote, and a transmitter transmits a desired program corresponding to a selected keypad sequence, and also transmits financial information of the user.

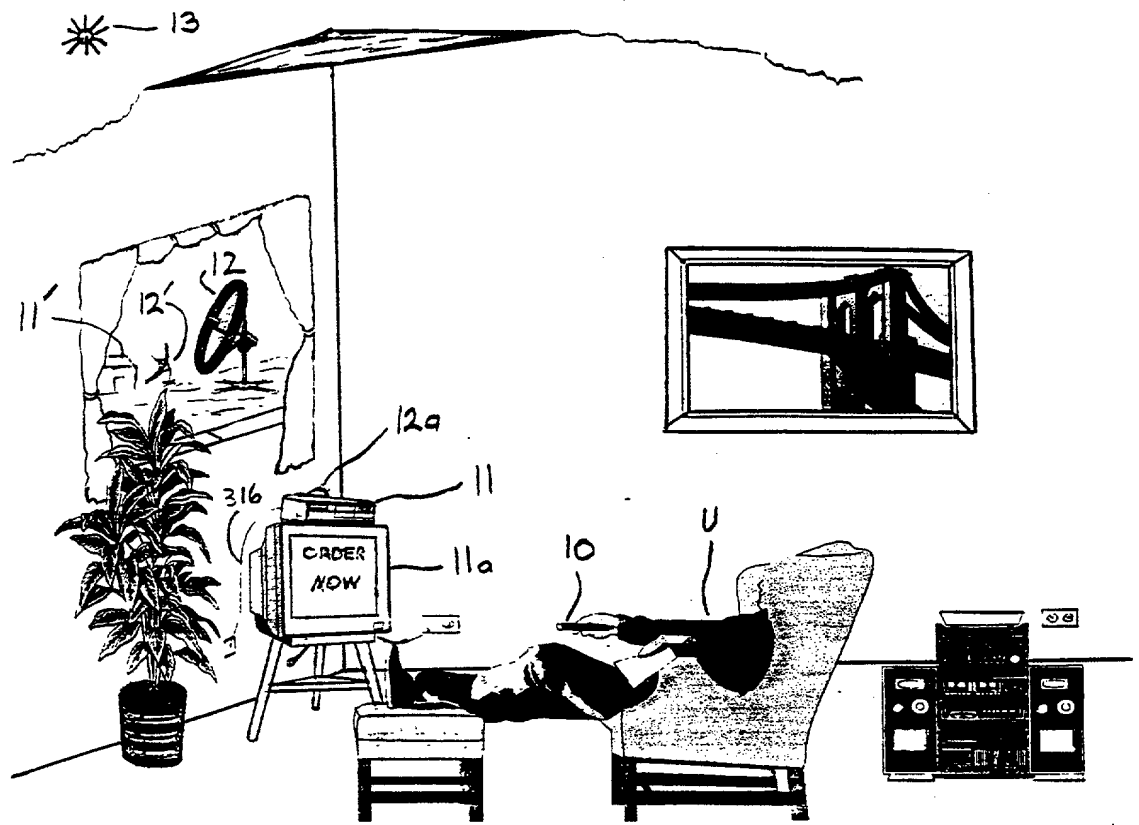


FIG. 1

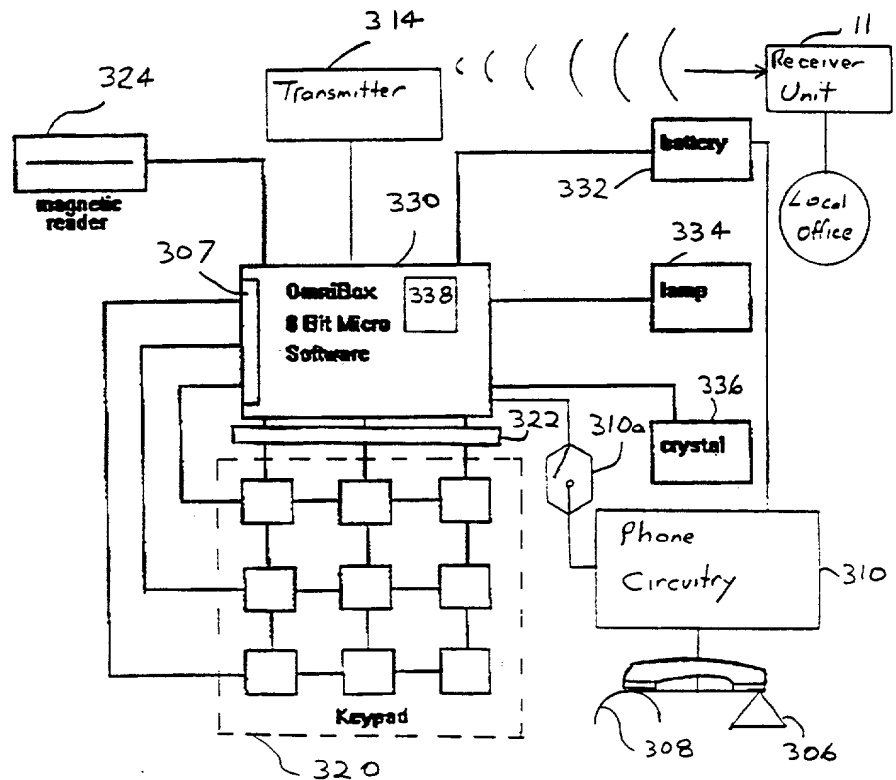


FIG 12

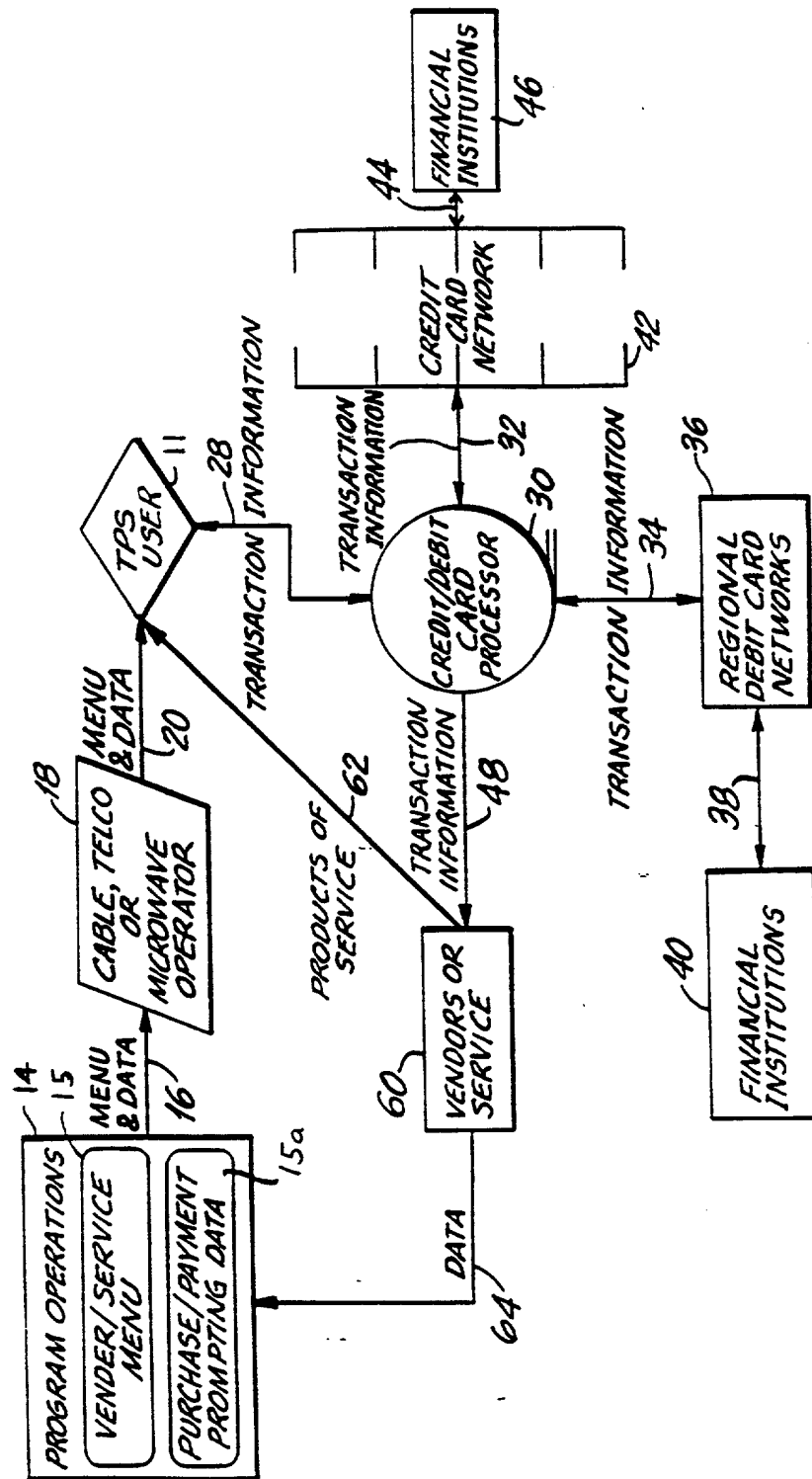


FIG. 2A

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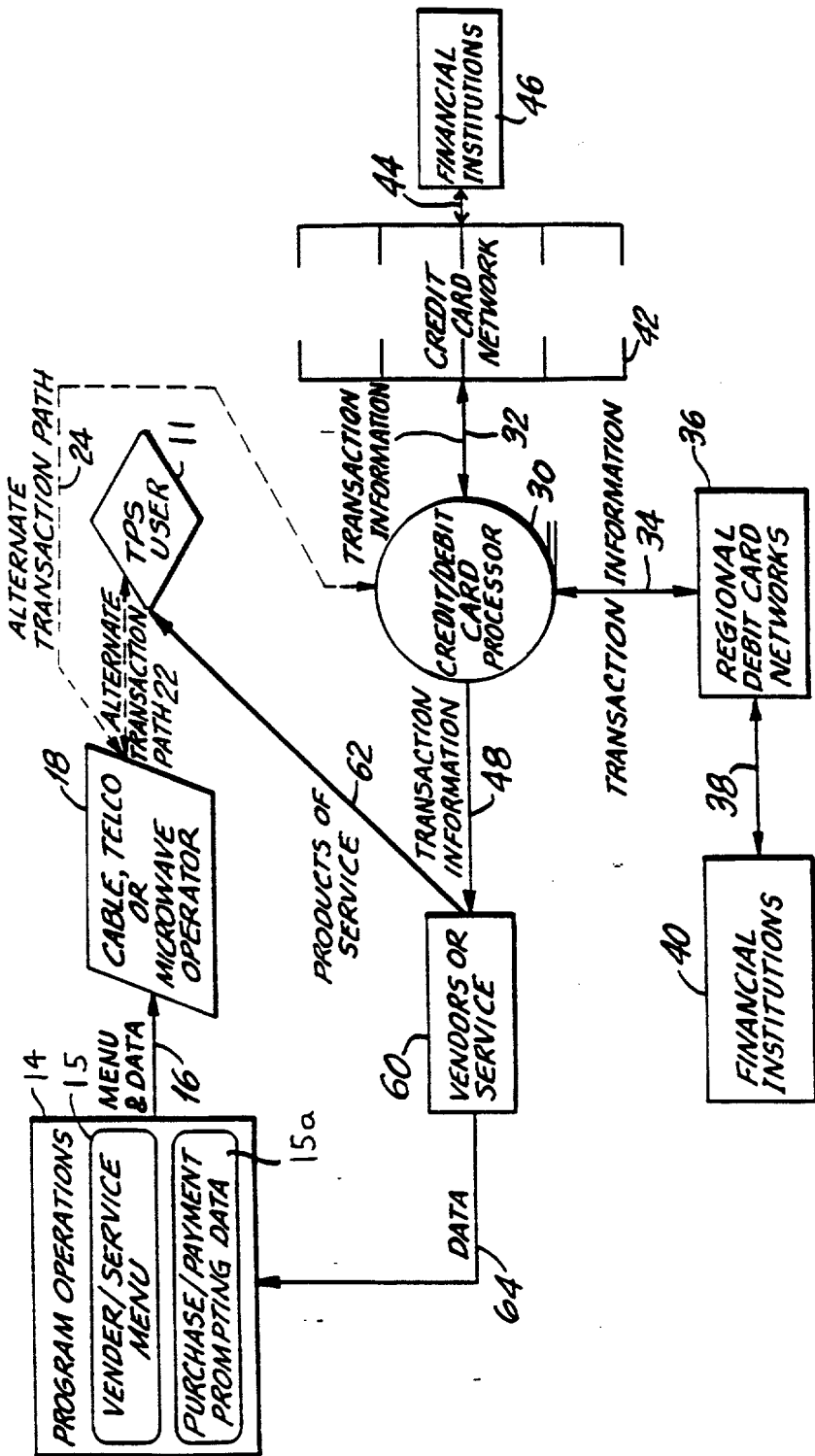


FIG. 2B

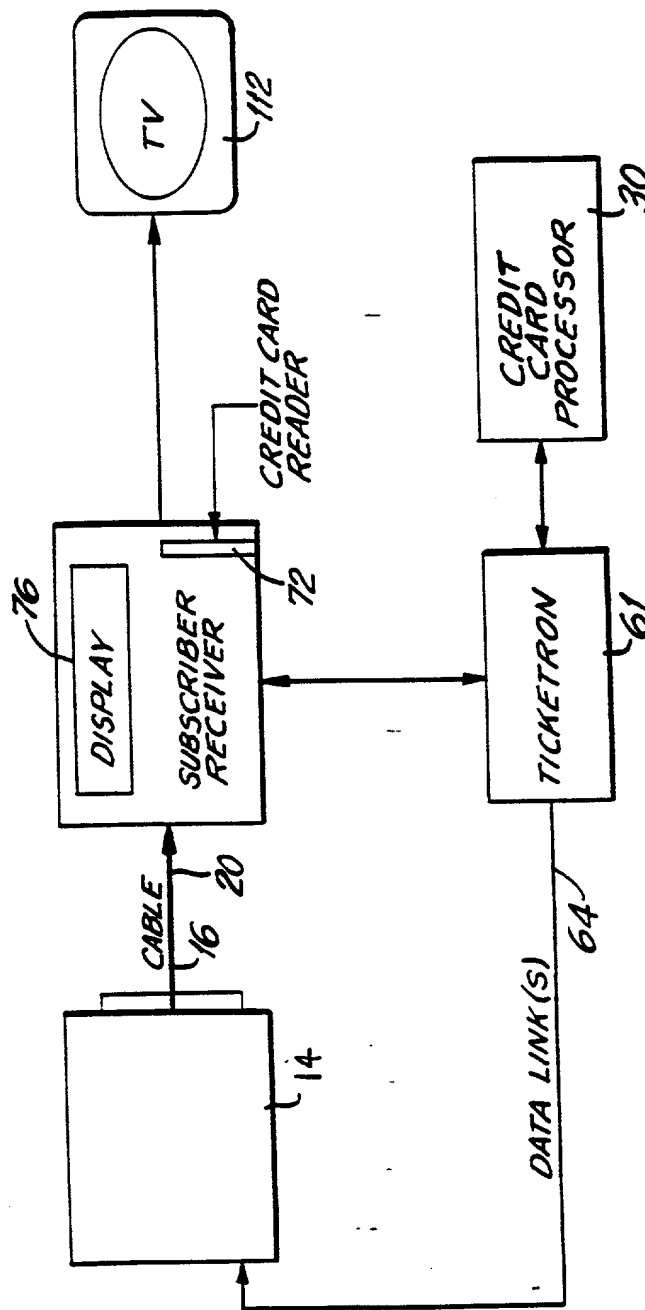


FIG. 3

U.S. Pat. No. 5,100,000, issued May 19, 1992, to International Business Machines Corporation, is hereby incorporated by reference into this document.

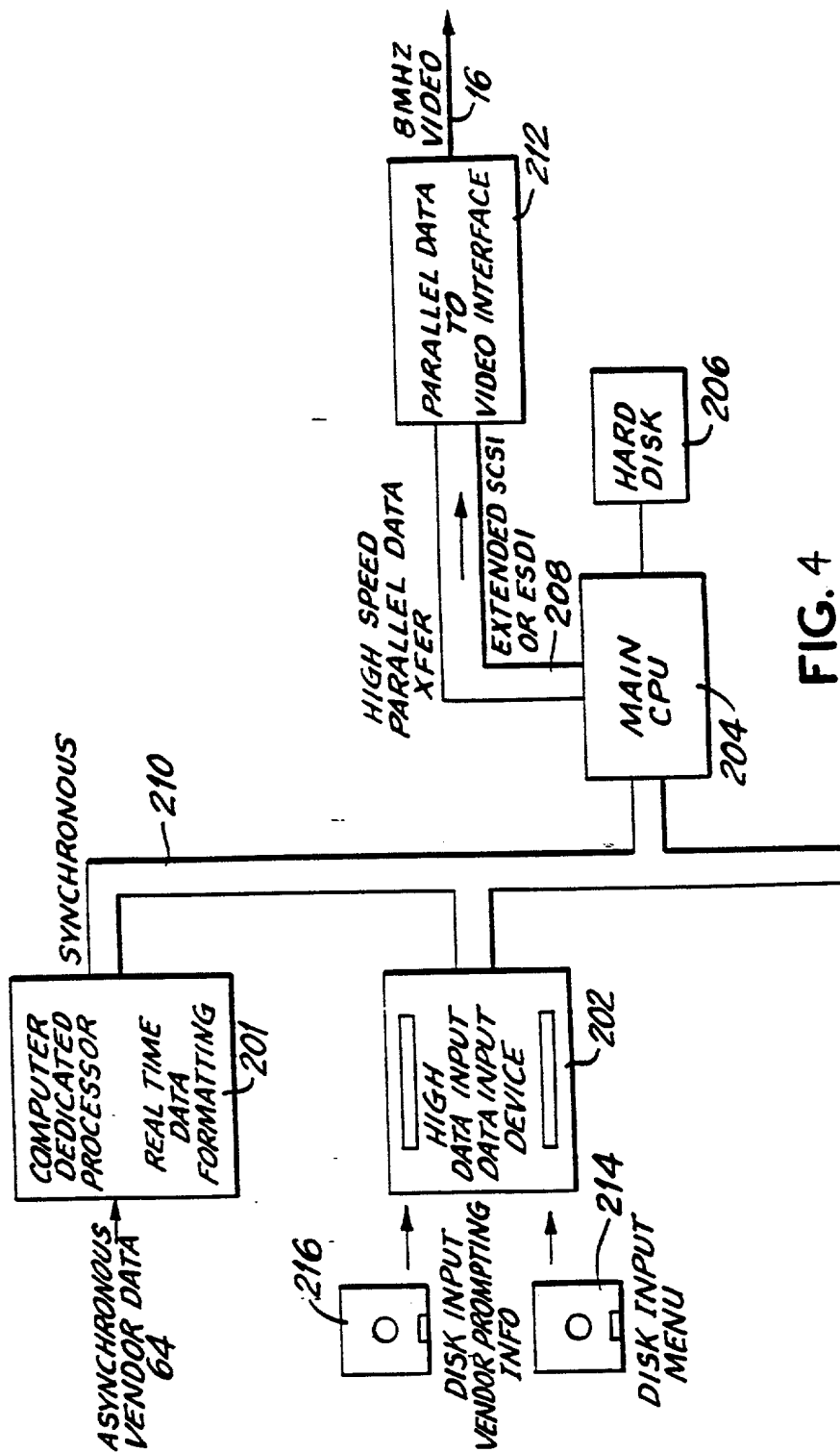
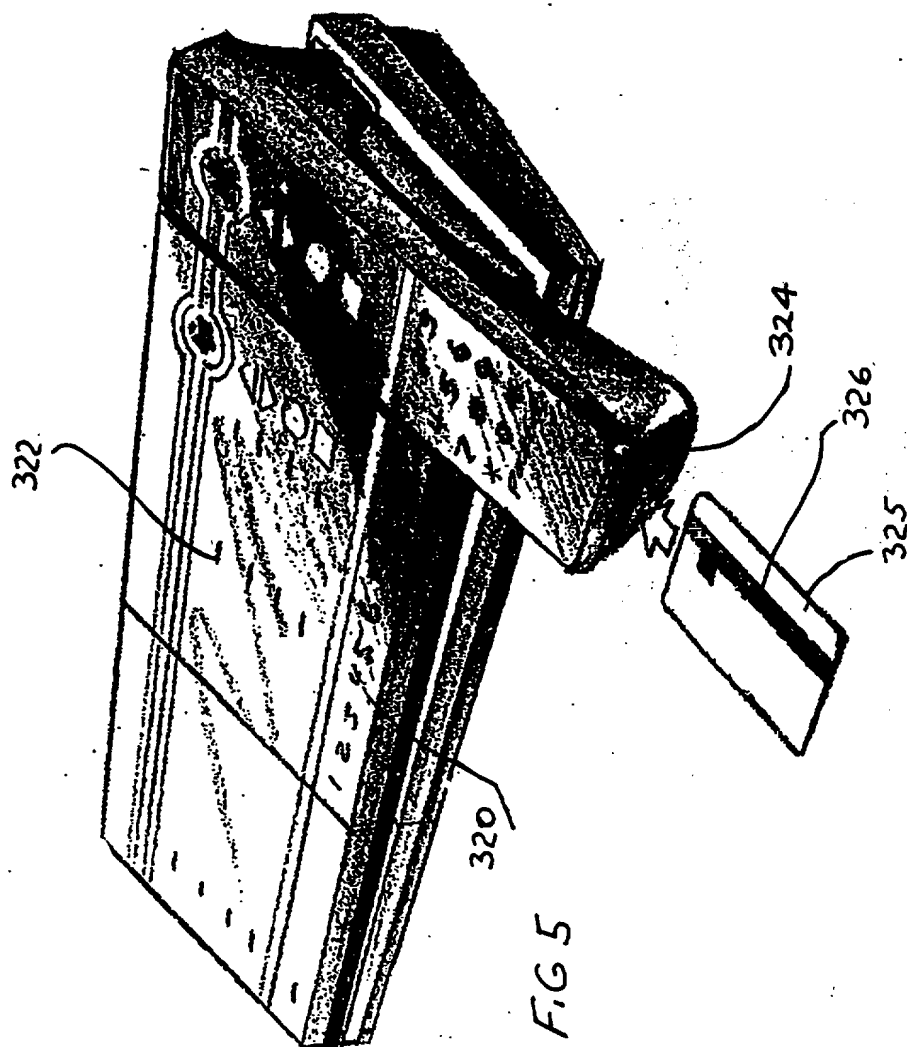
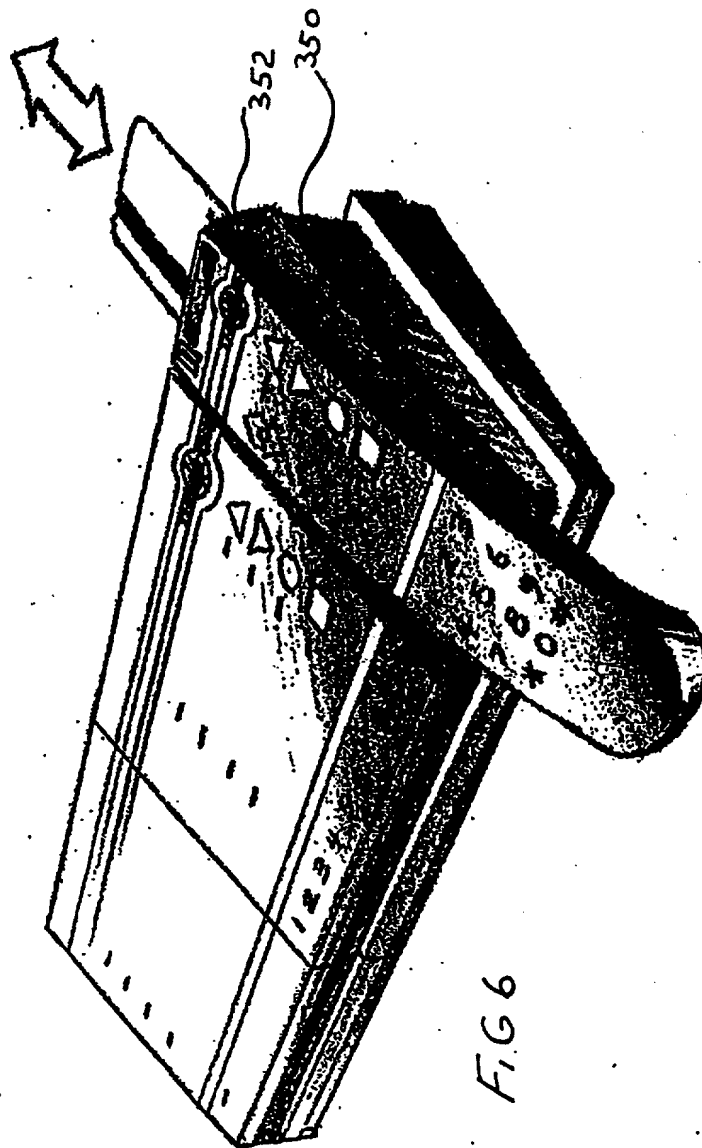


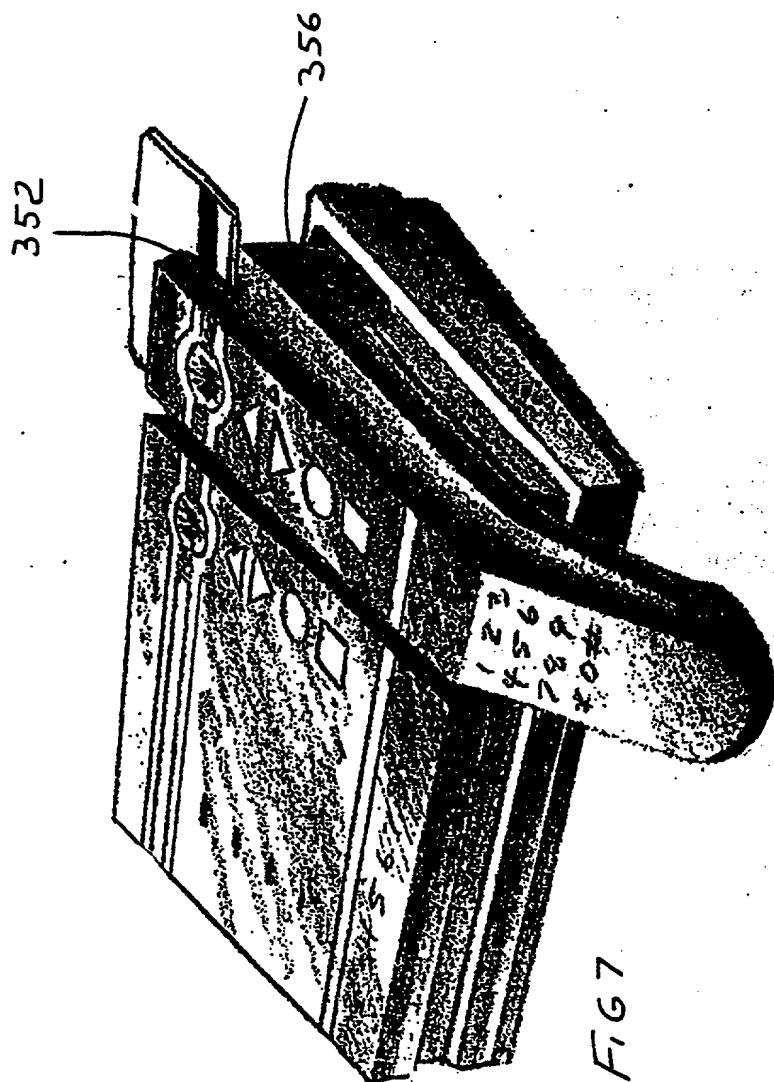
FIG. 4

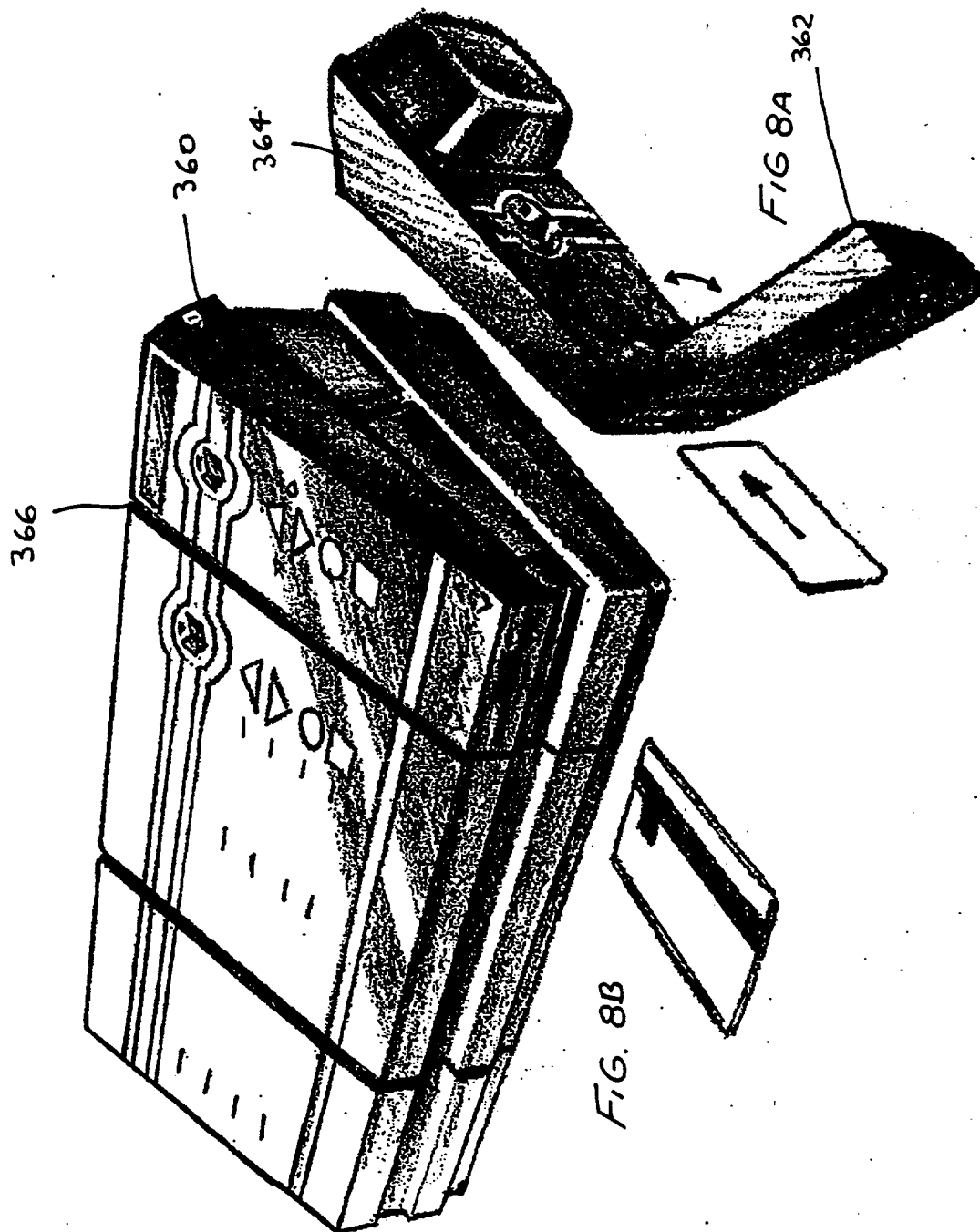
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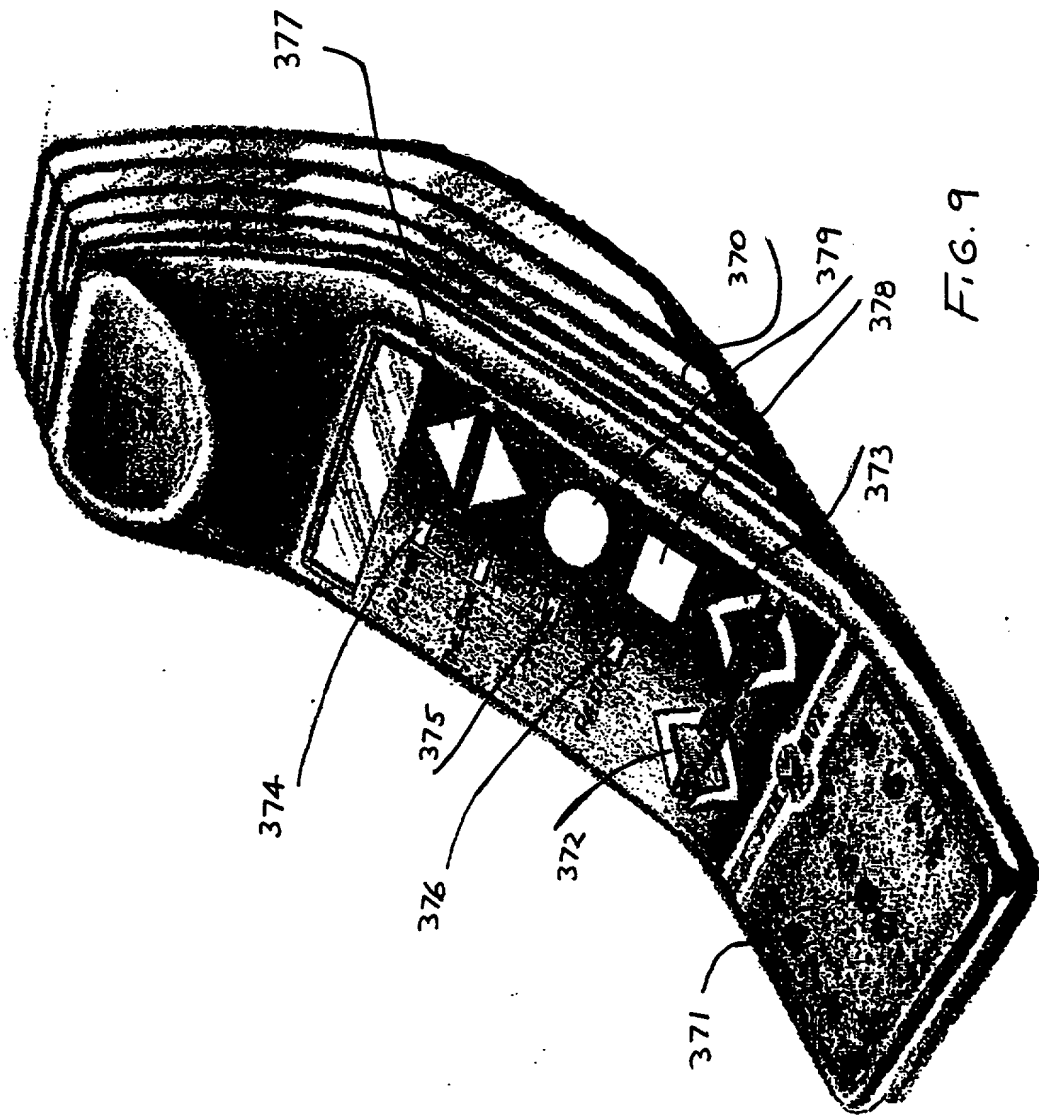


FIG. 9

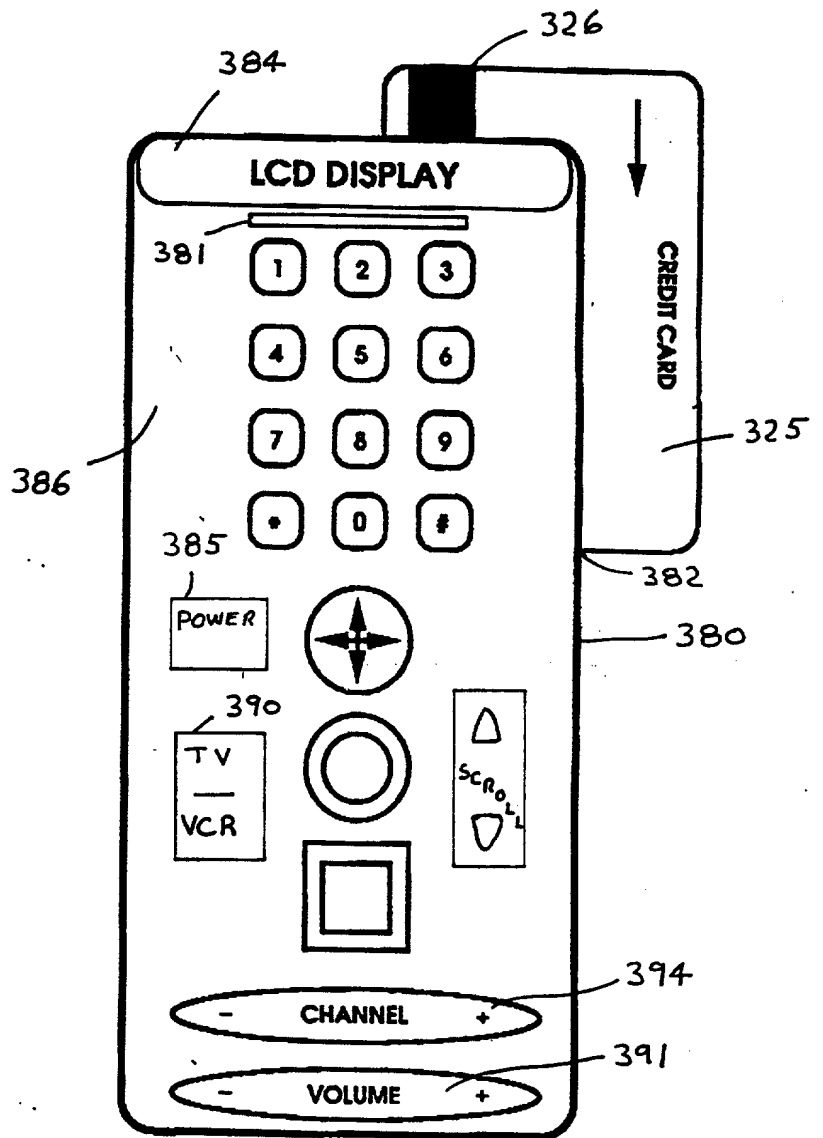
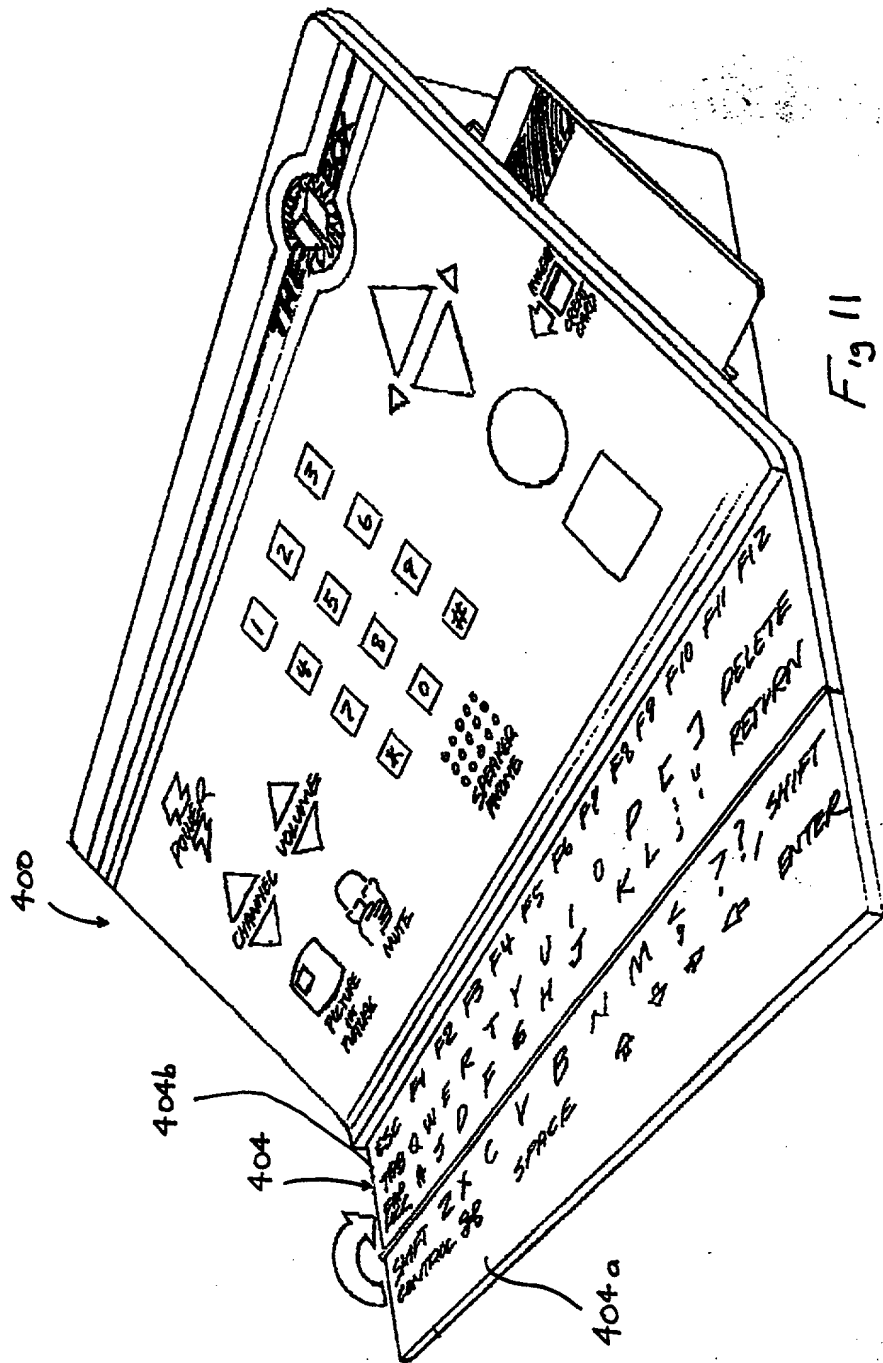
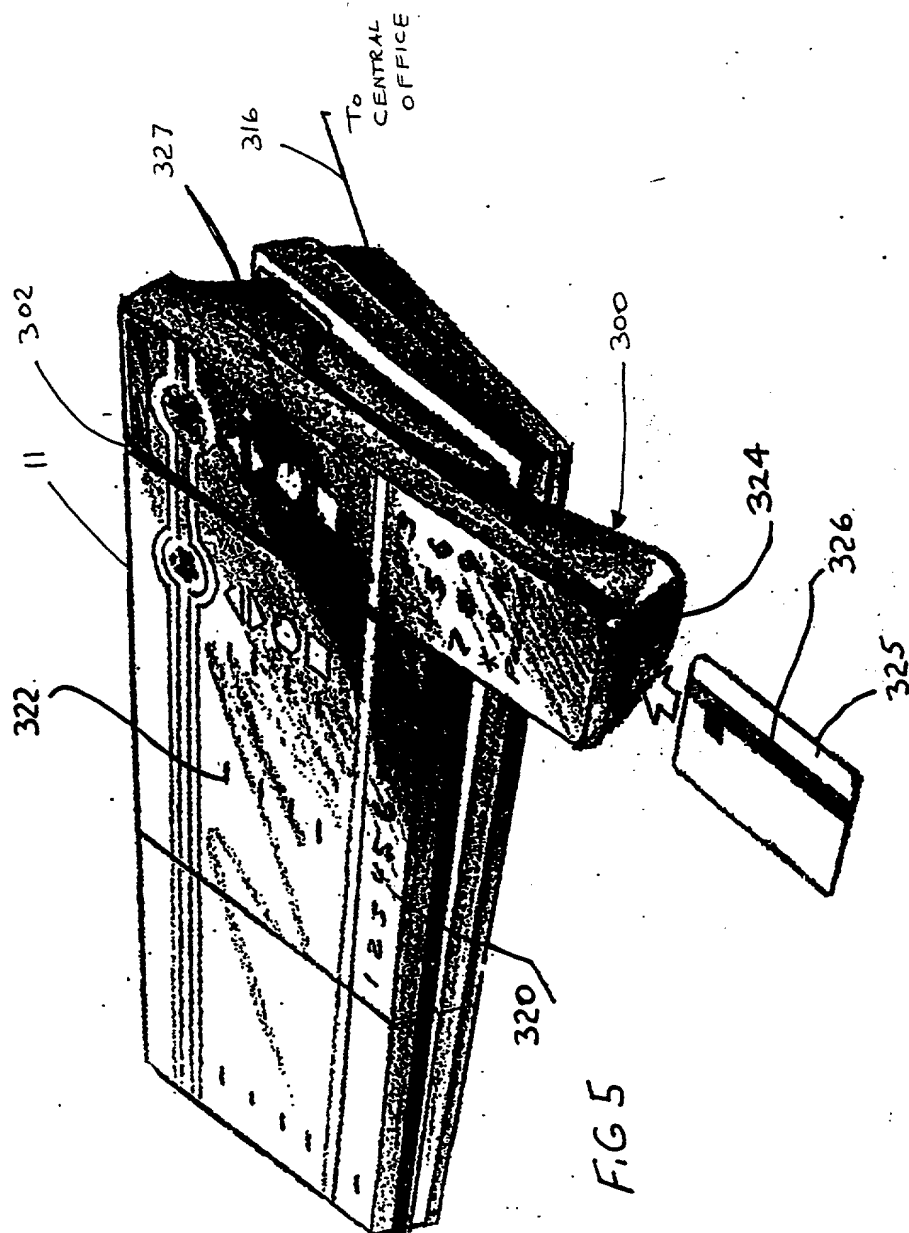


FIG 10



262027 0232000



Express Mail
No. EI08626

Label
No. EI086261629US

COMBINED DECLARATION AND POWER OF ATTORNEY FOR
ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL,
DIVISIONAL, CONTINUATION OR CONTINUATION-IN-PART APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

DEVICE FOR CONTROLLING REMOTE INTERACTIVE RECEIVER
the specification of which

- a. ☐ is attached hereto
- b. ☒ was filed on May 18, 1995 as application Serial No. 08/444,202 and was amended on _____ (if applicable).

PCT FILED APPLICATION ENTERING NATIONAL STAGE

- c. ☐ was described and claimed in International Application No. _____ filed on _____ and as amended on _____ (if any).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

☐ I hereby claim foreign priority benefits under Title 35, United States Code § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

☐ The attached 35 U.S.C. § 119 claim for priority for the U.S. application(s) listed below forms a part of this declaration.

Country	Application Number	Date of filing (day, month, yr)	Date of issue (day, month, yr)	Priority Claimed
				<input type="checkbox"/> YES <input type="checkbox"/> NO
				<input type="checkbox"/> YES <input type="checkbox"/> NO
				<input type="checkbox"/> YES <input type="checkbox"/> NO

ADDITIONAL STATEMENTS FOR
DIVISIONAL, CONTINUATION OR CONTINUATION-IN-PART

I hereby claim the benefit under Title 35, United States Code § 120 of any United States application(s) listed below.

<u>08/191,143</u>	<u>February 2, 1994</u>	<u>Pending</u>
Application Serial No.	Filing Date,	Status (patented, pending, abandoned)
 <u>07/591,380</u>	 <u>October 1, 1990</u>	 <u>Abandoned</u>
Application Serial No.	Filing Date,	Status (patented, pending, abandoned)

[] In this continuation-in-part application, insofar as the subject matter of any of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or Imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint the following attorneys and/or agents with full power of substitution and revocation, to prosecute this application, to receive the patent, and to transact all business in the Patent and Trademark Office connected therewith: John D. Foley (Reg. No. 16,836), John A. Diaz (Reg. No. 19,550), Thomas P. Dowling (Reg. No. 19,221), John C. Vassil (Reg. No. 19,098), Warren H. Rotert (Reg. No. 19,659), Alfred P. Ewert (Reg. No. 19,887), David H. Pfeffer, P.C. (Reg. No. 19,825), Harry C. Marcus (Reg. No. 22,390), Robert E. Paulson (Reg. No. 21,046), Stephen R. Smith (Reg. No. 22,615), Kurt E. Richter (Reg. No. 24,052), J. Robert Dailey (Reg. No. 27,434), Eugene Moroz (Reg. No. 25,237), John F. Sweeney (Reg. No. 27,471), Arnold I. Rady (Reg. No. 26,601), Christopher A. Hughes (Reg. No. 26,914), William S. Feiler (Reg. No. 26,728), Joseph A. Calvaruso (Reg. No. 28,287), James W. Gould (Reg. No. 28,859), Richard C. Komson (Reg. No. 27,913), Israel Blum (Reg. No. 26,710), Bartholomew Verdirame (Reg. No. 28,483), Maria C. H. Lin (Reg. No. 29,323), Joseph A. DeGirolamo (Reg. No. 28,595), Christopher E. Chalsen (Reg. No. 30,936), Michael A. Nicodema (Reg. No. 33,199) and Michael P. Dougherty (Reg. No. 32,730) of Morgan & Finnegan whose address is: 345 Park Avenue, New York, New York 10154.

[] I hereby authorize the U.S. attorneys and/or agents named hereinabove to accept and follow instructions from _____ as to any action to be taken in the U.S. Patent and Trademark Office regarding this application without direct communication between the U.S. attorneys and/or agents and me. In the event of a change in the person(s) from whom instructions may be taken I will so notify the U.S. attorneys and/or agents named hereinabove.

I hereby specify the following as the correspondence address to which all communications about this application are to be directed:

SEND CORRESPONDENCE TO:

MORGAN & FINNEGAN, 345 Park Avenue, New York, N.Y. 10154

DIRECT TELEPHONE CALLS TO: RICHARD K. WARTHER, ESQ.
(212) 758-4800Full name of sole or first inventor Thomas A. Bush✓ Inventor's signature* Thomas A. Bush 10-16-95

date

Residence 100 First Stamford Place, Suite 200, Stamford, Connecticut 06902-6732Citizenship U.S.A.Post Office Address Same as above

Full name of second joint inventor, if any _____

Inventor's signature* _____

date

Residence _____

Citizenship _____

Post Office Address _____

☒ ATTACHED IS ADDED PAGE TO COMBINED DECLARATION AND POWER OF ATTORNEY FOR SIGNATURE BY THIRD AND SUBSEQUENT INVENTORS FORM.

* Before signing this declaration, each person signing must:

1. Review the declaration and verify the correctness of all information therein; and
2. Review the specification and the claims, including any amendments made to the claims.

After the declaration is signed, the specification and claims are not to be altered.

To the inventor(s):

The following are cited in or pertinent to the declaration attached to the accompanying application:

Title 37, Code of Federal Regulation, §1.56

Duty to disclose information material to patentability

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim

is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

Title 35, U.S. Code § 101

Inventions patentable

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Title 35 U.S. Code § 102

Conditions for patentability; novelty and loss of right to patent

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent,
- (b) the invention was patented or described in a printed publication in this or foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States, or
- (c) he has abandoned the invention, or
- (d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States, or
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent, or
- (f) he did not himself invent the subject matter sought to be patented, or
- (g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other ...

Title 35, U.S. Code § 103

Conditions for patentability; non-obvious subject matter

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Title 35, U.S. Code § 112 (in part)

Specification

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Title 35, U.S. Code, § 119

Benefit of earlier filing date in foreign country; right of priority

An application for patent for an invention filed in this country by any person who has, or whose legal representatives or assigns have, previously regularly filed an application for a patent for the same invention in a foreign country which affords similar privileges in the case of applications filed in the United States or to citizens of the United States, shall have the same effect as the same application would have if filed in this country on the date on which the application for patent for the same invention was first filed in such foreign country, if the application in this country is filed within twelve months from the earliest date on which such foreign application was filed; but no patent shall be granted on any application for patent for an invention which had been patented or described in a printed publication in any country more than one year before the date of the actual filing of the application in this country, or which had been in public use or on sale in this country more than one year prior to such filing.

Title 35, U.S. Code, § 120

Benefit or earlier filing date in the United States

An application for patent for an invention disclosed in the manner provided by the first paragraph of section 112 of this title in an application previously filed in the United States, or as provided by section 363 of this title, which is filed by an inventor or inventors named in the previously filed application shall have the same effect, as to such invention, as though filed on the date of the prior application, if filed before the patenting or abandonment of or termination of proceedings on the first application or an application similarly entitled to the benefit of the filing date of the first application and if it contains or is amended to contain a specific reference to the earlier filed application.

Please read carefully before signing the Declaration attached to the accompanying Application.

If you have any questions, please contact Morgan & Finnegan

FORM: COMB-DEC.NY
Rev. 6/26/95

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) or Patentee(s) : Thomas A. Bush
Serial No. or Patent No. : 08/444,202
Filed or Issued : May 18, 1995
For : **DEVICE FOR CONTROLLING
REMOTE INTERACTIVE RECEIVER**
Group Art Unit : To Be Assigned
Examiner: : To Be Assigned

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY
STATUS (37 CFR § 1.9 (f) and § 1.27 (b)) - INDEPENDENT INVENTOR**

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR § 1.9(c) for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled
DEVICE FOR CONTROLLING REMOTE INTERACTIVE RECEIVER

described in

☐ the specification filed herewith.

☒ application Serial No. 08/444,202, filed May 18, 1995.

☐ Patent No. _____, issued _____.

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license any rights in the invention to any person who could not be classified as an independent inventor under 37 CFR § 1.9(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR § 1.9(d) or a nonprofit organization under 37 CFR § 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed or licensed or am under an obligation under contract or law to assign, grant, convey or license any rights in the invention is listed below:

- ☐ no such person, concern or organization
☐ persons, concerns or organizations listed below*

*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities.
(37 CFR § 1.27)

NAME N/A

ADDRESS _____
☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

NAME N/A

ADDRESS _____
☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

PATENT

DOCKET NO. 1029-4012 US2

NAME _____

ADDRESS _____
☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR § 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Thomas A. Bush

NAME OF INVENTOR	NAME OF INVENTOR	NAME OF INVENTOR
<u>Thomas A. Bush</u>		
Signature Of Inventor	Signature Of Inventor	Signature Of Inventor
<u>10/19/95</u>		
Date	Date	Date

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